

5

15

20

25

WHAT IS CLAIMED IS:

- 1. A carpet latex compound which is comprised of (a) a carboxylated styrene-butadiene latex, (b) a filler and (c) a thickener; wherein said carboxylated styrene-butadiene latex is comprised of (i) water, (ii) a carboxylated styrene-butadiene rubber, (iii) an emulsifier and (iv) a rosin acid soap.
- 2. Carpet which is comprised of a backing and a pile which is bonded to said backing with an admixture of a carboxylated styrene-butadiene rubber, a rosin acid soap and a filler.
 - 3. A process for manufacturing carpet which comprises the steps of (1) coating one side of a backing with a carpet latex compound to produce a latex-coated backing, wherein the carpet latex compound is comprised of (a) a carboxylated styrene-butadiene latex, (b) a filler and (c) a thickener; and wherein said carboxylated styrene-butadiene latex is comprised of (i) water, (ii) a carboxylated styrene-butadiene rubber, (iii) an emulsifier and (iv) a rosin acid soap; (2) bringing a pile into contact with the coated side of the latex-coated backing, (3) allowing the carpet latex compound to dry while keeping the pile in contact with the coated backing to produce the carpet.
- 4. A campet latex compound as specified in claim 1 wherein said rosin acid soap is selected from the group consisting of potassium soaps of rosin acid, sodium soaps of rosin acid and lithium soaps of rosin acid.

- 5. A carpet latex compound as specified in claim 1 wherein said rosin acid soap is a potassium soap of rosin acid.
- 6. A carpet latex compound as specified in claim 4 wherein said rosin acid soap is present at a level which is within the range of about 0.05 phr to about 10 phr.
- 7. A carpet latex compound as specified in claim 6 wherein said curative is zinc oxide.
- 8. A carpet latex compound as specified in claim 7 wherein said filler is present in an amount which is within the range of about 250 phr to about 800 phr.
 - 9. A carpet latex compound as specified in claim 8 wherein said rosin acid soap is present at a level which is within the range of about 0.1 phr to about 5 phr.
- 10. A carpet latex compound as specified in claim 9 wherein said thickener is present in an amount which is within the range of about 0 1 phr to about 5 phr.
 - 11. A carpet latex compound as specified in claim 10 wherein filler is calcium carbonate.
 - 12. A carpet latex compound as specified in claim 11 wherein said rosin acid soap is present at a level which is within the range of about 0.25 phr to about 2 phr.

35

30

CTTTTTTT CTTC

5

20

25

30

- 13. A carpet latex compound as specified in claim 12 wherein said carboxylated styrene-butadiene rubber is comprised of repeat units which are derived from about 52 weight percent to about 69.5 weight percent styrene, from about 30 weight percent to about 45 weight percent 1,3 butadiene, and from about 1 weight percent to about 3 weight percent itaconic acid.
- 14. A carpet latex compound as specified in claim 12 wherein said carboxylated styrene-butadiene rubber is comprised of repeat units which are derived from about 58 weight percent to about 63.4 weight percent styrene, from about 35 weight percent to about 40 weight percent 1,3 butadiene, and from about 1.6 weight percent to about 2 weight percent itaconic acid.
 - 15. A carpet latex compound as specified in claim 14 wherein said rosin acid scap is present at a level which is within the range of about 0.5 phr to about 1 phr.
 - 16. Carpet as specified in claim 2 wherein said carboxylated styrene-butadiene rubber is comprised of repeat units which are derived from about 52 weight percent to about 69.5 weight percent styrene, from about 30 weight percent to about 45 weight percent 1,3-butadiene, and from about 1 weight percent to about 3 weight percent itaconic acid; wherein said rosin acid soap is selected from the group consisting of potassium soaps of rosin acid, sodium soaps of rosin acid and lithium soaps of rosin acid; and wherein said filler is an inorganic carbonate.

B9

17. Carpet as specified in claim 2 wherein said carboxylated styrene-butadiene rubber is comprised of repeat units which are derived from about 58 weight percent to about 63.4 weight percent styrene, from about 35 weight percent to about 40 weight percent 1,3-butadiene, and from about 1.6 weight percent to about 2 weight percent itaconic acid; wherein said rosin acid soap is a potassium soap of rosin acid; and wherein said filler is calcium carbonate.

18. A carpet latex composition as specified in claim 1 wherein said carboxylated styrene-butadiene rubber contains repeat units which are derived from about 45 weight percent to about 74.5 weight percent styrene, from about 25 weight percent to about 50 weight percent 1,3-butadiene, and from about 0.5 weight percent to about 5 weight percent itaconic acid.

19. A carpet latex as specified in claim 1 wherein said rosin acid soap in present at a level which is within the range of about 0.05 phr to about 10 phr.

20. A carpet latex compound as specified in claim 12 wherein said carboxylated styrene-butadiene rubber is comprised of repeat units which are derived from about 52 weight percent to about 69.5 weight percent styrene, from about 30 weight percent to about 45 weight percent 1,3-butadiene and from about 1 weight percent to about 3 weight percent unsaturated carboxylic acid monomers selected from the group consisting of acrylic acid, methacrylic acid, fumaric acid and itaconic acid.

Add and itacon

Uī

15

20

25